REMARKS

The Examiner rejected claims 10-25 and 27-30 under 35 U.S.C. §112, sec nd paragraph.

The Examiner rejected claims 10, 11, 14, 16, 20, 24, and 27-29 under 35 U.S.C. §102(b) as allegedly being anticipated by Nishimura et al. (USPAT 5604380, Nishimura).

The Examiner rejected claims 10, 17-19 and 30 under 35 U.S.C. §102(b) as allegedly being anticipated by Kozono (USPAT 5619070).

The Examiner rejected claims 12 and 25 under 35 U.S.C. §103(a) as allegedly being unpatentable over Nishimura as applied to claim 10 above, and further in view of Chen et al. (USPAT 5413950, Chen).

The Examiner rejected claim 13 under 35 U.S.C. §103(a) as allegedly being unpatentable over Nishimura as applied to claim 10 above, and further in view of Nishino et al. (USPAT 5586385, Nishino).

The Examiner rejected claim 15 under 35 U.S.C. §103(a) as allegedly being unpatentable over Nishimura as applied to claim 10 above, and further in view of Ichinose et al. (USPAT 5681402, Ichinose).

The Examiner rejected claim 21 under 35 U.S.C. §103(a) as allegedly being unpatentable over Nishimura as applied to claim 10 above, and further in view of Robeson et al. (GB PAT 2297503, Robeson).

The Examiner rejected claims 22 and 23 under 35 U.S.C. §103(a) as allegedly being unpatentable over Nishimura as applied to claim 10 above, and further in view of one of ordinary skill in the art.

Applicants traverse the §112, §102 and §103 rejections with the following arguments.

35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 10-25 and 27-30 under 35 U.S.C. §112, second paragraph.

As a first rejection with respect to claims 10, 28, and 29, the Examiner alleged that the claim "recites the limitation "the following steps" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim. For purposes of this office action "the following steps" will be considered --steps--." In response, Applicants contend that the phrase "comprising the following steps" inherently mean the steps which follow, and there is therefore no lack of antecedant basis. Otherwise, one could allege that "steps" in the phrase "comprising the steps of" likewise lacks antecedant basis.

As a second rejection with respect to claims 10, 28, and 29, the Examiner alleged that the claim "recites the limitation "the indicated order" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim. No order has been indicated in the claims. Therefore, no order will be considered.... It should be noted that an indicated sequential order implies that there is a definite order claimed. Such order is characterized by something to the effect of "...a first step of...a second step of..." or "...after forming..." or "...after providing..." and all steps would fit somewhere into the order." In response, Applicants contend that the phrase "the indicated sequential order" inherently means exactly what it states. For example, in claim 1 the phrase "the indicated order" inherently means that the steps are to be performed in the order that the steps are recited. Accordingly, therefore no lack of antecedant basis.

For support, Table 1 below cites 10 patents, all issued on June 10, 2003, which use language similar to Applicants language for introducing steps of a method claim:

Table 1

#	U.S.P. No.	Claim	Language Introducing Steps of Method Claim
1	6,578,169	9	A method of storing failure data detected when testing a semiconductor device under test (DUT), comprising the following steps of:
2	6,578,151	13	The arrangement as claimed in claim 12, wherein, upon receipt of the signed data from the user, at least one of the following steps is selectively performed:
3	6,578,119	13	A method for memory management in the memory device, wherein the method comprises the following steps;
4	6,577,687	12	A method of transmitting data from a sender to a receiver over a data bus, comprising the following steps in the sequence set forth:
5	6,577,444	1	A method for image-based illumination effect in a three-dimensional scene, comprising the following steps of:
6	6,576,578	4	A process for producing a synthetic quartz glass, which comprises the following steps in the stated order:
7	6,576,539	31	A method of making a semiconductor chip assembly, comprising the following steps in the sequence set forth:
8	6,576,489	18	The method of claim 16 further comprising the following steps in the following sequence,
9	6,576,301	1	A method of producing a contact structure having a contactor thereon for achieving an electrical connection with a contact target, comprising the following steps of:
10	6,576,674	13	A process for production of a multi cutter reaming tool with a shaft and a head with at least one cutter, comprising the following steps, in order:

As to the Examiner's first rejection with respect to claims 10, 28, and 29, Table 1 cites 10 patents (i.e., # 1-10) **all issued on a single day** (June 10, 2003) and all referring to method steps as "the following steps". Extrapolating to one year (i.e., 52 weeks), Applicants estimate that the United States Patent and Trademark Office issues more than 500 patents per year in which "the following steps" is used to introduce steps of a method claim. The preceding evidence overwhelmingly demonstrates that the language "the following steps" is fully acceptable language and that the Examiner's position on this issue is in conflict with the practices and policies of the United States Patent and Trademark Office.

As to the Examiner's second rejection with respect to claims 10, 28, and 29, Table 1 cites 5 patents (i.e., # 4, 6, 7, 8, 10)) **all issued on a single day** (June 10, 2003) and all using language similar to Applicants language (i.e., "comprising the following steps performed in the indicated sequential order") to sequence the order of steps in a method claim. Extrapolating to one year (i.e., 52 weeks), Applicants estimate that the United States Patent and Trademark Office issues more than 250 patents per year in which said language is used to sequence the order of steps in a method claim. The preceding evidence overwhelmingly demonstrates that said language is fully acceptable language and that the Examiner's position on this issue is in conflict with the practices and policies of the United States Patent and Trademark Office.

35 U.S.C. §102

Nishimura

The Examiner rejected claims 10, 11, 14, 16, 20, 24, and 27-29 under 35 U.S.C. §102(b) as allegedly being anticipated by Nishimura et al. (USPAT 5604380, Nishimura). The Examiner alleges that "Nishimura discloses in figure 2a a method for forming an electronic structure. Nishimura discloses in figure 2a providing a metallic plate (3) such that all exterior surfaces of the metallic plated are exposed. Nishimura discloses in figure 2a forming a mineral layer (4) on the metallic plate. Nishimura discloses in figure 2a forming an adhesion promoter layer (5) on the mineral layer."

Applicants respectfully contend that Nishimura does not anticipate claims 10, 28, and 29 because Nishimura et al. does not teach each and every feature of claims 10, 28, and 29. For example, Nishimura does not teach "providing a metallic plate such that all exterior surfaces the metallic plate are exposed". In contrast, Nishimura teaches depositing an Al film on the semiconductor substrate 1 to form the metallic plate (3) (see Nishimura, col. 10, lines 26-29). Thus, the metallic plate (3) that is so formed is not provided as having all of its exterior surfaces exposed as required by claim 10.

In the Examiner's "Response To Arguments", the Examiner alleges: "it should be noted that-in the providing step of Nishimura the bottom surface of the metallic plate is exposed to layer 2. Also, the other surfaces of the metallic plate are exposed to the process environment after the providing step. There is no limitation in the applicant's claimed invention that states to what the surfaces of the metallic plate must be exposed. Therefore the applicant's arguments are not

persuasive, and the rejection is proper."

In response to the preceding argument by the Examiner, Applicants respectfully contend that after the providing step in Nishimur, the bottom surface of the metallic plate is in direct mechanical contact with the the layer 2, as shown in FIG. 2(a) of Nishimura and as described in Nishimura, col. 10, lines 26-29. Accordingly, the bottom surface of layer 2 is never "exposed". Applicants submits the following definition of "exposed" in the context of claims 10, 28, and 29. The definition of "exposed" is: "laid open to view; unconcealed". See The Webster Encyclopedic Unabridged Dictionary of the English Language" 682 (new deluxe ed. 1996).

Based on the preceding argument, Applicants respectfully maintain that Nishimura does not anticipate claims 10, 28, and 29, and that claims 10, 28, and 29 are in condition for allowance. Since claims 11, 14, 16, 20, 24, and 27 depend from claim 10, Applicants contend that claims 11, 14, 16, 20, 24, and 27 are likewise in condition for allowance.

Kozono

The Examiner rejected claims 10, 17-19 and 30 under 35 U.S.C. §102(b) as allegedly being anticipated by Kozono (USPAT 5619070). The Examiner alleges that "Kozono discloses in figure 2a a method for forming an electronic structure. Kozono discloses in figure 2a providing a metallic plate (15). Kozono discloses in figure 2a forming a mineral layer (14) on the metallic plate. Kozono discloses in figure 2a an adhesion promoter layer (13) on the mineral layer."

Applicants respectfully contend that Kozono does not anticipate claim 10, because Kozono does not teach each and every feature of claim 10.

As a first reason why Kozono does not teach each and every feature of claim 10, Kozono does not teach "forming a mineral layer on the metallic plate". Applicants respectively contends that Kozono does not teach that the adhesive 14 is a mineral layer as alleged by the Examiner. Since Kozono does not disclose any material composition for the adhesive 14, one may not conclude that Kozono teaches that the adhesive 14 is a mineral layer.

In the Examiner's "Response To Arguments", the Examiner alleges: Kozono clearly teaches that the adhesive layer is an mineral layer. Kozono's disclosure encompasses all known conductive adhesive layers. The applicant has not showed any evidence that a conductive adhesive layer can never be a mineral layer. Neither has the applicant claimed what material comprises the mineral layer. Thus, Kozono reads on the claimed invention. Therefore the applicant's arguments are not persuasive, and the rejection is proper."

In response to the preceding argument by the Examiner, Applicants respectfully contend

that the the rejection under 35 U.S.C. §102(b) requires that Kozono explicitly or inherently teach that the adhesive 14 is a mineral layer, and the Examiner has not cited any text within Kozon t show that Kozono explicitly or inherently teaches that the adhesive 14 is a mineral layer. Although the Examiner has alleged that "Kozono's disclosure encompasses all known conductive adhesive layers", the Examiner has provided no citation in Konzono to support said allegation. Furthermore, the Examiners's statement that "applicant has not showed any evidence that a conductive adhesive layer can never be a mineral layer" is an impermissible attempt to shift the burden of proof to Applicants. Accordingly, Applicants maintain that Kozono does not anticipate claim 10.

As a second reason why Kozono does not teach each and every feature of claim 10, Kozono does not teach "forming an adhesion promoter layer on the mineral layer". Applicants respectively contends that the mounting plate 13 is not an adhesion promoter as alleged by the Examiner. Instead, the mounting plate13 is a plate structure having two plates, namely plates 13-1 and 13-2 as shown in FIG. 2B and described in col. 4, lines 3-20. Plate 13-1 is an insulating plate made of a ceramic material and plate 13-2 is a metal layer (see Kozono, col. 4, lines 5-6, 11-13), which confirms that the mounting plate 13 does not have the functionality of adhesion promotion. Therefore, one may not conclude that Kozono teaches that the mounting plate 13 is an adhesion promoter layer.

In the Examiner's "Response To Arguments", the Examiner alleges: In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art.... In this case the plate 13 has the intended use of promoting the adhesion between

mineral layer 14 and the layer 12 in figure 2a of Kozono".

In response to the preceding argument by the Examiner, Applicants respectfully contend that the Kozono's mounting plate 13 does not have the functionality or intended use of being an adhesion promoter layer, as explained *supra* with reference to FIG. 2B and col. 4, lines 3-20 of Kozono. The Examiner has providedno citation in Kozono that supports the Examiner's allegation that "the plate 13 has the intended use of promoting the adhesion between mineral layer 14 and the layer 12 in figure 2a of Kozono." Accordingly, Applicants maintain that Kozono does not anticipate claim 10.

As a third reason why Kozono does not teach each and every feature of claim 10, Kozono does not teach forming the steps of "providing a metallic plate such that all exterior surfaces the metallic plate are exposed; forming a mineral layer on the metallic plate; and forming an adhesion promoter layer on the mineral layer", "**in the indicated sequential order**" (emphasis added). For example, Kozono does not teach performing the step of "forming an adhesion promoter layer on the mineral layer" **after** performing the step of "forming a mineral layer on the metallic plate" as required by claim 10. Kozono teaches in col. 3, lines 46-48 that "[t]he semiconductor chip mounting plate 13 is fixed to a heat radiating plate 15 made of Cu or the like, by means of the adhesive 14", which is not a teaching that the mounting plate 13 is formed on the adhesive layer 14 after the adhesive layer 14 is formed on the radiating plate 15.

In the Examiner's "Response To Arguments", the Examiner alleges: "the recitation "in the indicated sequential order" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely

recites the purpose f a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone.... Further, as indicated in the U.S.C. section 112, second paragraph rejection, it is not clear what, if any, order has been indicated. Therefore the applicant's arguments are not persuasive, and the rejection is proper."

In response to the preceding argument by the Examiner, Applicants respectfully contend that the overwhelming evidence presented *supra* in conjunction with the 35 U.S.C. §112, second paragraph rejections leaves no doubt as to the meaning and patentable weight associated with "comprising the following steps performed in the indicated sequential order". Accordingly, Applicants maintain that Kozono does not anticipate claim 10.

Based on the preceding arguments, Applicants respectfully maintain that Kozono does not anticipate claim 10, and that claim 10 is in condition for allowance. Since claims 17-19 and 30 from claim 10, Applicants contend that claims 17-19 and 30 ewise in condition for allowance.

35 U.S.C. §103

The Examiner rejected claims 12, 13, 15, 21, 22, 23, and 25, under 35 U.S.C. §103(a). Since claims 12, 13, 15, 21, 22, 23, and 25 depend from claim 10, which Applicants have argued *supra* to be patentable under 35 U.S.C. §102, Applicants maintain that claims 12, 13, 15, 21, 22, 23, and 25 are not unpatentable under 35 U.S.C. §103(a).

CONCLUSION

Based on the preceding arguments, Applicants respectfully believe that all pending claims 10-30 and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below.

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Jack P. Friedman
Registration No. 44,688

Schmeiser, Olsen & Watts
3 Lear Jet Lane, Suite 201
Latham, New York 12110
(518) 220-1850